



WORKPLACE SAFETY AND HEALTH IN OHIO

*From The
National Institute for Occupational Safety and Health*



State Profile 2002

*Delivering on the Nation's promise:
Safety and health at work for all people through prevention.*

The National Institute for Occupational Safety and Health

NIOSH is the primary federal agency responsible for conducting research and making recommendations for the prevention of work-related illness and injury. NIOSH is located in the Department of Health and Human Services in the Centers for Disease Control and Prevention. The NIOSH mission is to provide national and world leadership to prevent work-related illness, injury, disability, and death by gathering information, conducting scientific research, and translating the knowledge gained into products and services. As part of its mission, NIOSH supports programs in every state to improve the health and safety of workers. NIOSH has developed this document to highlight recent NIOSH programs important to workers and employers in Ohio.

The Burden of Occupational Illness and Injury in Ohio

- In Ohio, there are approximately 5.5 million individuals employed in the workforce.¹
- In 2000, 207 workers died as a result of workplace injuries.²
- The transportation and public utilities industry had the highest number of fatalities, followed second by construction, and third by manufacturing.²
- In 1999, the most recent year for which data are available, the rate of fatal workplace injuries was 3.9 deaths per 100,000 workers—below the national average rate of 4.5 deaths per 100,000 workers.²

The Cost of Occupational Injury and Illness in Ohio

In 2000, the most recent year for which data are available, a total of \$2.1 billion was paid for workers' compensation claims by Ohio private insurers, self-insured employers, and state funds.³ This figure does not include compensation paid to workers employed by the federal government and also underestimates the total financial burden for private sector businesses, since only a fraction of health care costs and earnings lost through work injuries and illnesses is covered by workers' compensation. Chronic occupational illnesses like cancer are substantially under-reported in workers' compensation systems because work-relatedness is often difficult to establish.

How NIOSH Prevents Worker Injuries and Diseases in Ohio

Health Hazard Evaluations (HHEs) and Technical Assistance

NIOSH evaluates workplace hazards and recommends solutions when requested by employers, workers, or state or federal agencies. Since 1993, NIOSH has responded to 360 requests for HHEs in Ohio in a variety of industrial settings, including the following example:

Mason, Ohio: Evaluation of Visual Disturbances Related to Amine Exposure

In January 2001, NIOSH received a request for an HHE from the management of a printing plant in Mason, Ohio. Employees in a division of the plant were experiencing blurry vision at work, and one employee had been evaluated by an ophthalmologist who found a “film over his eyes.” NIOSH found that employee exposure to amines present at the plant was associated with decreased vision and clouding of the cornea that were reversible but a safety hazard for employees, both on the job and when driving home. Recommendations to managers included diluting the pH adjuster - which contains the amine causing the visual problems - with water, covering ink pails to reduce the amount of chemicals vaporizing into the work environment, and improving local exhaust ventilation at printing presses. It also was recommended that, when handling chemicals, employees wear gloves made of materials that provide sufficient protection. No visual complaints have occurred since management began to dilute the pH adjuster with water.

Fatality Assessment and Control Evaluation (FACE) Investigations

NIOSH developed the FACE program to identify work situations with a high risk of fatality and to formulate and disseminate prevention strategies. In Ohio, FACE is conducted by the Ohio Department of Health, under a cooperative agreement with NIOSH. Since 1995, there have been six FACE investigations in Ohio, including the following example:

Ohio: Sixteen-Year-Old Laborer Crushed by Forklift

On December 22, 1999, a 16-year-old male part-time laborer suffered fatal crushing injuries when the forklift he had been operating tipped over. The youth had been operating the forklift to transport an empty pallet from a building supply center warehouse to an outside storage yard. As he turned from an asphalt-paved alley onto the gravel-surfaced storage yard, the forklift tipped, pinning him to the ground by the overhead guard. NIOSH investigators concluded that to help prevent similar occurrences, employers should: ensure forklifts are operated only by authorized, trained employees; ensure that forklift operators use seatbelts; comply with child labor laws prohibiting youth less than 18 years of age from operating forklifts.

Fire Fighter Fatality Investigation and Prevention Program

The purpose of the NIOSH Fire Fighter Fatality Investigation and Prevention Program is to determine factors that cause or contribute to fire fighter deaths suffered in the line of duty. NIOSH uses data from these investigations to generate fatality investigation reports and a database of case results that guides the development of prevention and intervention activities. Since 1997, there have been eight fire fighter fatality investigations in Ohio.

Building State Capacity

State-Based Surveillance

NIOSH funds the Adult Blood Lead Epidemiology and Surveillance Program (ABLES) in the Ohio Department of Health. Through ABLES, Health Department staff track and respond to cases of excessive lead exposure in adults which can cause a variety of adverse health outcomes such as kidney or nervous system damage and potential infertility. In addition, NIOSH funds the Sentinel Event Notification System for Occupational Risk, or SENSOR, through which Health Department staff track and develop interventions for specific occupational diseases and injuries such as silicosis.

NIOSH Facilities in Ohio

Three NIOSH Divisions are located in Cincinnati. A variety of research is conducted in these facilities, from biomedical research conducted in the laboratory to hazard prevention methods applied in the field. Approximately 480 individuals are employed at NIOSH facilities in Ohio.

University of Cincinnati Education and Research Center (ERC)

The major objective of this ERC is to provide interdisciplinary professional and scientific training in industrial hygiene, occupational medicine, occupational safety, and occupational health nursing. The ERC, one of 16 NIOSH ERCs nationwide, also provides hazardous substance academic training for industrial hygienists and continuing education and outreach programs for the region. In fiscal year 2001, 72 students were enrolled and 17 were graduated; 78 continuing education courses were conducted for 1,527 practicing professionals.

Great Lakes Center for Agricultural Health and Safety

NIOSH funds the Great Lakes Center for Agricultural Safety and Health at Ohio State University in Columbus. The Center, one of ten NIOSH Centers for Agricultural Disease and Injury Research, Education, and Prevention nationwide, aims to reduce injuries, diseases, and deaths resulting from agricultural operations through education, intervention, and research. Diverse research topics include assessing the prevalence of asthma among farmers and their spouses, and implementing and evaluating sun safety interventions for pesticide applicators and other agricultural workers.

Graduate Training

NIOSH funds a master's of science program in occupational health and industrial hygiene at the Medical College of Ohio. In fiscal year 2001, 19 students were enrolled and five were graduated.

Extramural Programs Funded by NIOSH

The following is an example of recent research contracts, research grants, training grants, or cooperative agreements funded by NIOSH in the state of Ohio.

Reducing Violence Against Nursing Home Caregivers

Certified nursing assistants (CNAs) working in long-term care represent the occupation most at risk of workplace assault. CNAs receive minimal education to care for some of the most challenging and aggressive patients. As the number of nursing home patients and CNAs increases, improvements are needed in the nursing home environment. With support from NIOSH, researchers at the University of Cincinnati will test the effectiveness of an intervention to decrease violence against CNAs by increasing their skills to prevent assaults.

Additional information regarding NIOSH services and activities can be accessed through the NIOSH home page at <http://www.cdc.gov/niosh/homepage.html> or by calling the NIOSH 800-number at 1-800-356-NIOSH (1-800-356-4674).

¹U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics, Current Population Survey, 2000.

²DOL, BLS in cooperation with state and federal agencies, Census of Fatal Occupational Injuries, 1999-2000.

³National Academy of Social Insurance, *Workers' Compensation: Benefits, Coverage, and Costs, 2000 New Estimates*, May 2002.